

COMPETITIVENESS OF THE ARMENIAN PRIVATE SECTOR: MOVING TO THE NEXT STAGE*

Manuk Hergnyan, Economy and Values Research Center

Gagik Gabrielyan, Economy and Values Research Center

Anna Makaryan, Economy and Values Research Center

Abstract: *The paper examines Armenia's economic achievements, and explores the anatomy of Armenia's competitiveness by studying its underlying factors and causal links. It contrasts Armenia's economic performance and microeconomic foundations of competitiveness with peer or comparator countries. The "synthesis" part of the paper advances a set of recommendations and thoughts on the future development of Armenia and enhancement of national competitiveness, and covers such issues as the context of future policies, frameworks and mechanisms for setting priorities and designing short- to long-term development strategies, approaches for positioning Armenia in the region and globally.*

JEL Classification: O11, O12, O19, O29, O30

Keywords: Armenia, business environment, competitiveness and regional policies, international linkages and internationalization

* This paper is based on the content of the first National Competitiveness Report of Armenia, EV, 2008.

I. INTRODUCTION

Currently, competitiveness is a major challenge facing Armenia's decision makers in both the private and public sectors. While Armenia's economic growth rate is exceptionally high, it has only recently recovered to GDP levels seen in 1990 and wage levels are still less than half of levels seen in 1990. Economic performance has been largely dependent on external factors (e.g. remittances, assistance from international financial and donor organizations). Large and increasing regional disparities and continued poverty among some segments of the Armenian population create a sense of urgency to bring economic dynamism to all geographic areas and to all segments of the population. Armenia's disadvantage as a landlocked country increases the need for repositioning Armenia towards high-value products and services that are less subject to transportation cost disadvantages. Attaining higher levels of competitiveness will determine whether Armenia can achieve sustainable and harmonious economic growth beyond that bolstered by remittances, foreign assistance and resource exploitation.

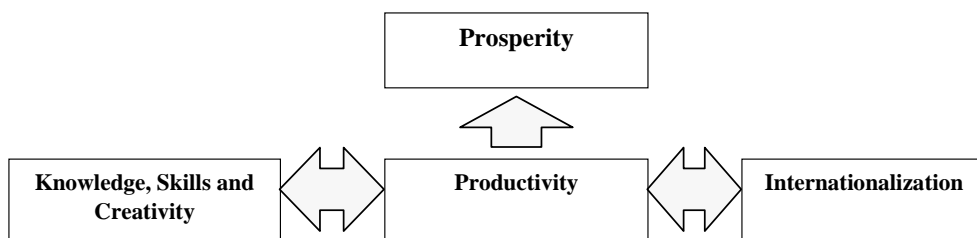
Competitiveness, which we define here as high and rising levels of productivity, is determined more by created factors than its resource endowments. It is a function of the nation's ability to develop an environment enabling firms and individuals to utilize the nation's resources and factors effectively and efficiently. It is about the ability of the nation, its firms and citizens to design, adopt, and implement sophisticated strategies and operations which allow efficient utilization of available resources and factors. In other words, competitiveness is about the ability to be productive.

Various benchmarks of competitiveness exist. Those generally considered most authoritative are provided by the World Economic Forum (WEF), International Institute for Management Development (IMD), and the Institute of Industrial Policy Studies (IPS). However, only WEF currently includes Armenia in its reports. Therefore, the paper we will heavily (but not exclusively) rely on WEF's indexes for assessing relative competitiveness.

II. ARMENIA'S RECENT ECONOMIC ACHIEVEMENTS

Prosperity is ultimately a choice. A nation's welfare or prosperity depends on its choices regarding how efficiently and effectively the nation utilizes and allocates its resources, or in other words, on how productive or competitive the nation is.

We start by looking at what the economic system of Armenia has yielded to date. First, we look at the achievement measures - prosperity - to assess the performance of the economic system and its results. Then we look at its key driver – productivity measures, and, after, two major enablers that stimulate the productivity growth, namely – internationalization and knowledge, skills and creativity measures. These are four closely linked indicators of economic achievement of a country. Prosperity depends on the productivity of a nation and on the way wealth is created and distributed in society. Innovative capacity is an important indication of economic achievement, and also an engine for productivity increase. Knowledge, skills and creative potential constitute the innovative capacity of a nation, a cluster, a firm and an individual. Internationalization illustrates the degree to which a country is successfully competing in foreign markets for goods, services and capital. Usually, high productivity is accompanied by increased levels of internationalization, and they together are strong supporters of knowledge and skills creation and upgrade.

Figure 2.1 Economic Yields and Competitiveness

Source: Adapted from Michael Porter (1998); EV, 2007

Armenia's economic performance is viewed in the international context, i.e. in comparison with regional and international competitor and/or peer countries and benchmark countries. For this purpose, peer and competitor countries are selected from the following regions: (a) Eastern Europe (EE), which includes Central and Eastern European (CEE) and Baltic countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, Slovenia) and Southeastern European (SEE) countries (Albania, Bulgaria, Bosnia-Herzegovina, Croatia, FYR Macedonia, Montenegro, Serbia, and Romania); (b) Commonwealth of Independent States (CIS), which includes Russia, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine, Uzbekistan); and (d) the regions which we refer to as Eurasian Crossroad Region between the Black, Mediterranean and Caspian Seas, of which Armenia is a part and which also includes Azerbaijan, Georgia, Jordan, Iran, Israel, Lebanon, Syria, and Turkey.

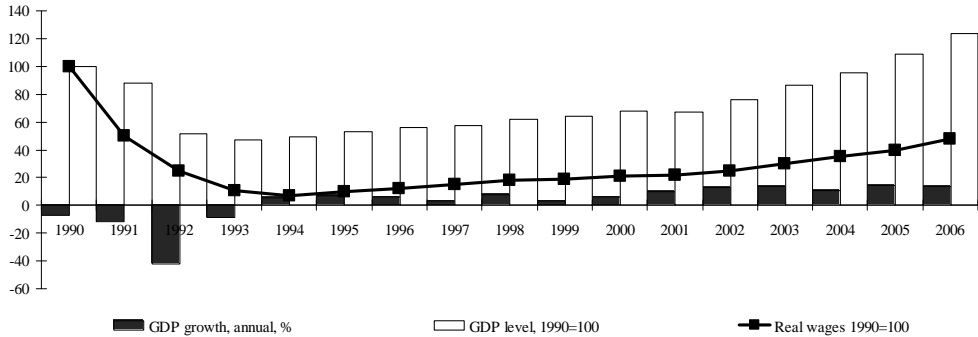
This regional coverage allows a fairly comprehensive comparison and a broad view on Armenia's position based on geographical and historical as well as social and economic factors. Countries of Eastern Europe and the CIS are all transition countries with a wide range of similarities inherited from communist regimes. The recent history of Armenia is closely linked to CIS countries, and there are still close economic and trade relations with many CIS countries. Comparison with European countries is also in line with current priorities in Armenia's foreign policy to achieve closer integration with the EU, and with the fact that the EU is now a major trade partner for Armenia. At the same time, Armenia has much longer historical, cultural and economic ties with countries of the Middle East and the Mediterranean, although they were interrupted during Soviet times. We refer to this region as the Eurasian Crossroad region. After the collapse of the Soviet Union, Eurasian Crossroad countries became important economic and trade partners for Armenia, and this region provides broad, but still unexploited market opportunities.

2.1 Prosperity

After more than 50 percent decline in GDP between 1991 and 1993, Armenia recorded 5.4 percent growth in 1994, and since has grown at an annual compound rate of 8.2 percent. The growth rate has been remarkably high during the last six years, at two digit levels. In 2004, after a decade of economic growth, the GDP level surpassed the 1990 level (Figure 2.2). Armenia's GDP growth rate outpaced almost all transition countries in EE, the CIS and the Eurasian Crossroad regions (Figures 2.3) in 2006. An exception was Azerbaijan, where a 34.5 percent GDP growth rate was registered versus 13.2 percent in Armenia for

the year 2006 (and 13.8 percent in 2007).¹ Azerbaijan's high growth rate was strongly driven by the energy sector which benefited from increasing oil and gas prices worldwide.

Figure 2.2 Armenia GDP and Wage Growth Rates (1990-2006)



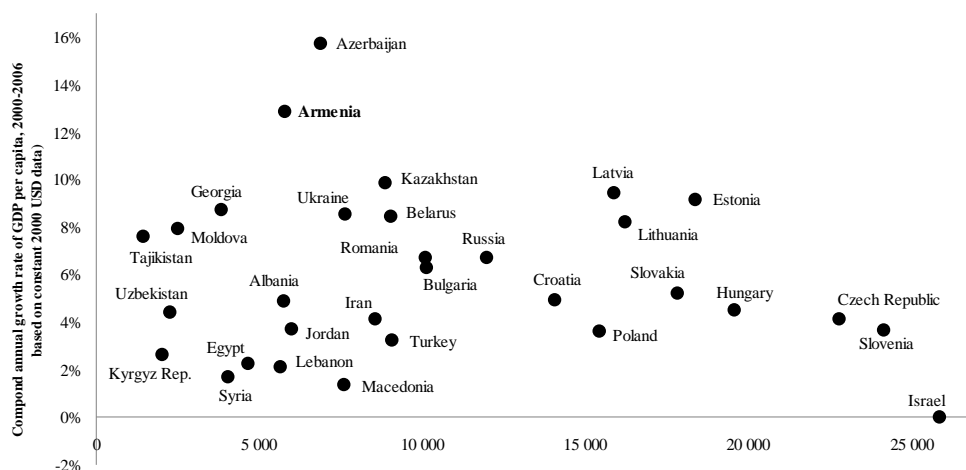
Source: NSS, various publications.

There has been a similar trend with regard to growth rates of GDP per capita. Between 2000 and 2006, Armenia's compound annual growth rate (CAGR) of GDP per capita was 12.9 percent, outpacing neighboring countries, as well as its regional peer/comparator countries, although lagging behind Azerbaijan (15.8 percent). With this growth rate, Armenia's GDP per capita in PPP terms surpassed USD 5000 in 2006, placing Armenia in the group of lower middle-income countries according to World Bank criteria.

Economic growth has brought about considerable improvements in the population's welfare in terms of real wage increases, poverty reduction, and increased spending on social services and transfers. However, a closer look shows that in absolute terms the level of Armenia's GDP, based on purchasing power parity (PPP) as well as GDP per capita, still remains low and lags behind most of its competitor and peer countries. In 2006, Armenia's GDP per capita (PPP) was higher than that of Georgia, Moldova, Kyrgyzstan, Uzbekistan, Tajikistan, Syria, Egypt, Lebanon and Albania, but was significantly lower than other EE, CIS and Eurasian Crossroad countries. Although the country's economy has been growing annually by two digits, this growth should be viewed against a very low GDP base.

Additionally, economic growth in Armenia has not resulted in corresponding wage growth; wage levels reached only around 40 percent of 1990 levels (Figure 2.2). Real unemployment levels (over 30 percent) and poverty (circa 26 percent in 2006) still remain quite high; the distribution of wealth in society is highly inequitable; and disparities between regions in terms of economic and social development are significant.

¹ National Statistical Service of Armenia (NSS), 2008.

Figure 2.3 Comparative Economic Performance (2000-2006)

Source: WB, WDI-Online, 2007 (last accessed October 2007); Authors' own calculations.

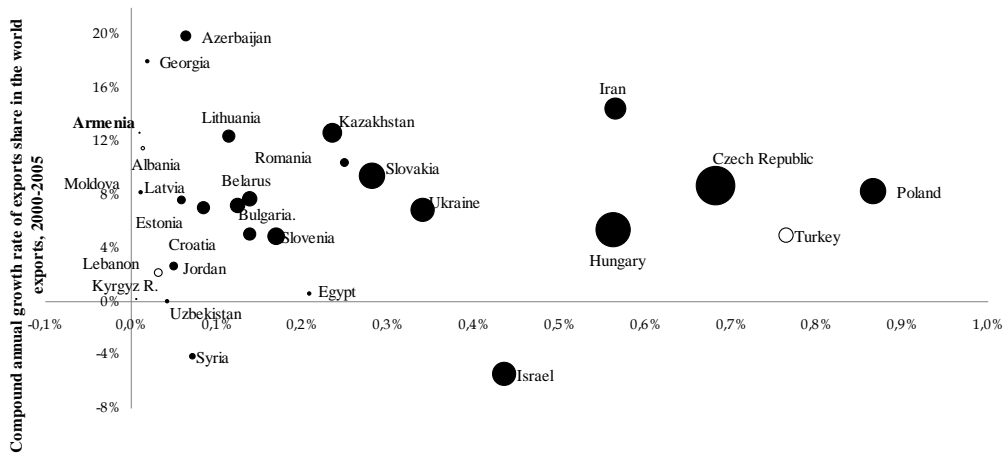
Note: The data for Israel is for 2005. Yellow bubbles indicate countries of Eastern Europe, dark blue – CIS countries, pink – Eurasian Crossroad countries.

2.2 Internationalization

A. Export Performance

We look at Armenia's export performance as an important indicator for measuring a country's comparative productivity and ability to compete in world markets. For a country like Armenia (with a small internal market) export performance is a crucial factor for economic development, as it permits the achievement of economies of scale and concentration on those sectors where the country is more competitive. The Government of Armenia has indicated that export promotion is one of its main priorities.

Since 2000 Armenia's share of world exports has more than doubled, although in absolute terms it remains very small and lags behind most of the EE, CIS and Eurasian Crossroad countries (Figure 2.4). Armenia's total share of world exports is slightly less than its share of world GDP. This is an indication that economic growth has not been export driven, but has been attained primarily through import substitution, growth of domestic demand, and growth of non-traded sectors of the economy. This is a warning sign for Armenia's international competitiveness given the small domestic market and, hence, the need for export-led growth as a long-term sustainable strategy. The difference between Armenia's share of world exports and share of world GDP is better than that of Turkey, Lebanon, and Albania, but is worse than that of other countries in EE, the CIS and Eurasian Crossroad regions.

Figure 2.4 Export Share in World Export (2000-2005, percent)

Source: WB, WDI-Online, 2007 (last accessed October 2007); Authors' own calculations.

Note: Bubble size indicates the difference of shares of world exports and world GDP. White color indicates that the share of nation's export in the world exports is less than the nation GDP share in the World GDP. These are generally considered underperformers. Data for Syria is for 2004.

Armenia's exports are largely resource intensive. The latter represented about 64 percent of the country's total merchandise exports in 2005 which increased to 69.5 percent in 2006; this is quite high compared with indicators of most counties in EE, the CIS and Eurasian Crossroad regions (Figure 2.5). It should be noted that in 2002-2004, the indicator of resource intensity of Armenia's exports was higher still at over 70 percent (2002 at 75, 2003 - at 77, and 2004 - at 71 percent)². The drop of the indicator in 2005 was due to the drop in the export of diamonds (in 2002 the share of diamonds among all merchandise exports was 48 percent compared with only 30.9 percent in 2005). High resource-intensity also means low value-added of Armenian exports. Higher value-added products and services are required to attain higher levels of productivity and competitiveness.

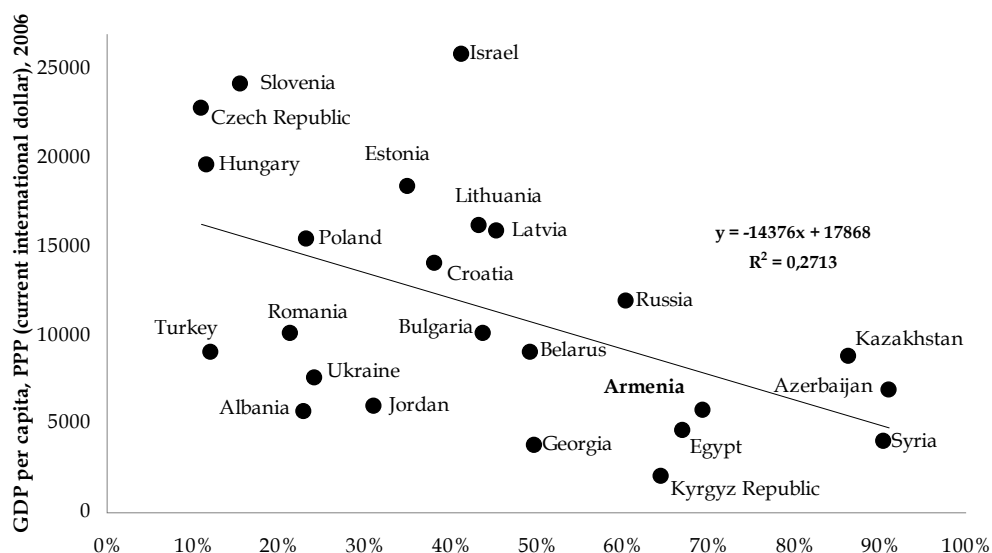
B. Investment Performance

Foreign direct investment (FDI) is an important factor that can contribute to economic performance and to productivity in several ways, including: (a) introduction of new technologies, managerial competences, and knowledge; (b) enhancing the business climate; (c) improving domestic competition; (d) job creation; and (e) increasing the quality of human resources. FDI-driven growth has been a model for economic growth in many countries (e.g. Hungary). In most such countries, the bulk of investment has been domestic, but FDI creates a leading edge and triggers new domestic investments.

² Resource intensive product groups were defined using the Lall (2000) classification of export by their technological intensity. Two groups of products were treated as resource based products: primary products (fresh fruit, meat, rice, cocoa, tea, coffee, wood, coal, crude, petroleum, gas) and resource based manufactures - agro/forest based products (prepared meats/fruits, beverages, wood products, vegetable oils) and other resource based products (ore concentrates, petroleum/rubber products, cement, cut gems, glass). Source: Chami Batista, 2004; UNCTAD, 2004; Mahmood, 2004

It is logical to expect, and the recent history of FDI has demonstrated, that high levels of FDI are recorded in countries with primary extractive industries, with a superior cost position, with large domestic markets, or in countries that can supply highly skilled scientists and engineers for high value-added processing and R&D activities. Given the constraints in natural resource endowments, size and geopolitical situation, in order to attract large and high quality FDI it is vital for Armenia to enhance knowledge intensive industries. This would boost the competitiveness of the nation, and over time would allow establishing or bringing high value processing elements of the global value chains of multinationals to Armenia.

Figure 2.5 Resource Intensity of Merchandise Exports (2006)

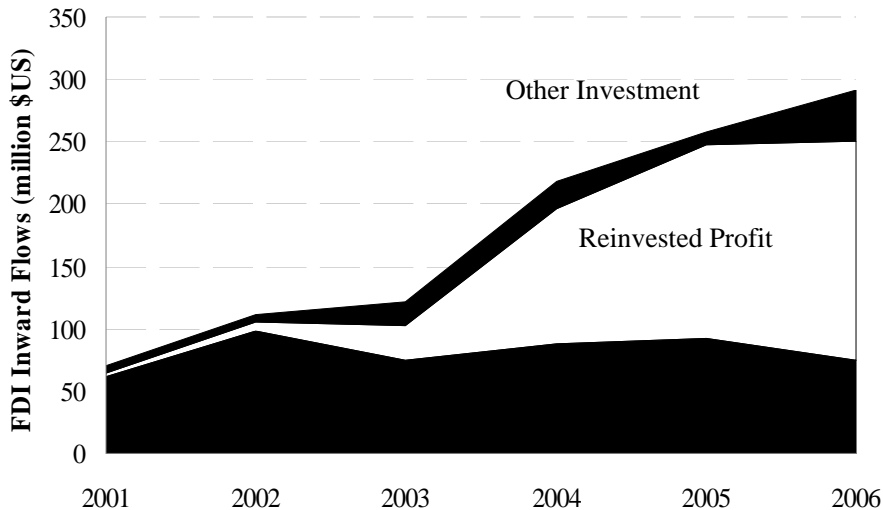


Source: WB, WDI-Online (last accessed: October 2007); UNCOMTRADE online database (last accessed: October 2007); Authors' own calculations.

Note: PPP adjusted GDP per capita of Israel is for 2005.

Between 2003 and 2007, the CAGR of inward FDI to Armenia was 52.9 percent, which, however, was driven mainly by reinvestments (Figure 2.6). The largest inflow of equity investments was observed in 2006, peaking at 216.7 million. The tremendous growth of FDI was due to the rise of reinvested profits and other investments. In 1998 through 2007, the major FDI recipients were electricity, gas and water supply (25.2 percentage share), post and telecommunications (19.8), mining and quarrying (14.6), and food products and beverages (7.7) sectors³. If the current trends continue, Armenia will soon exhaust its potential to attract even resource-driven FDI into new sectors.

³ National Statistical Service of Armenia, 2008.

Figure 2.6 Inward FDI, Armenia (2001 - 2006)

Source: NSS of Armenia, Balance of Payments, various publications.

2.3 Knowledge, Skills and Creativity

Since independence, the R&D and innovation performance of Armenia has been rather disappointing. Once an important center for scientific research and high-tech production in the former Soviet Union⁴, Armenia has lost most of its scientific and technological (S&T) resources and has yet to exploit its S&T potential. Until recently, the promotion and development of innovation were, practically, out of the Government's policy agenda.

Armenia has a higher tertiary education expenditure/GDP per capita ratio than most other countries, but in absolute terms tertiary student expenditure is lower than that of most countries. Government expenditure on R&D has been extremely low and negligible and below that of most competitor and peer countries in EE, the CIS and Eurasian Crossroad regions (both as a percentage of GDP and, more dramatically, in absolute terms). In 2006, R&D expenditures accounted for 0.22% of GDP. In 2005, Government R&D expenditure was only 0.12% of GDP, and there has been a similar ratio in the previous five years. Armenia's private sector businesses also had very low expenditure for R&D and for employee training (less than Government expenditure). In 2005, total R&D expenditure in the country was only 0.23% of GDP.⁵

2.4 Productivity

Armenia's prosperity measured in terms of GDP per capita reflects both the level of labor force utilization and the productivity at which labor is employed. Labor productivity is an

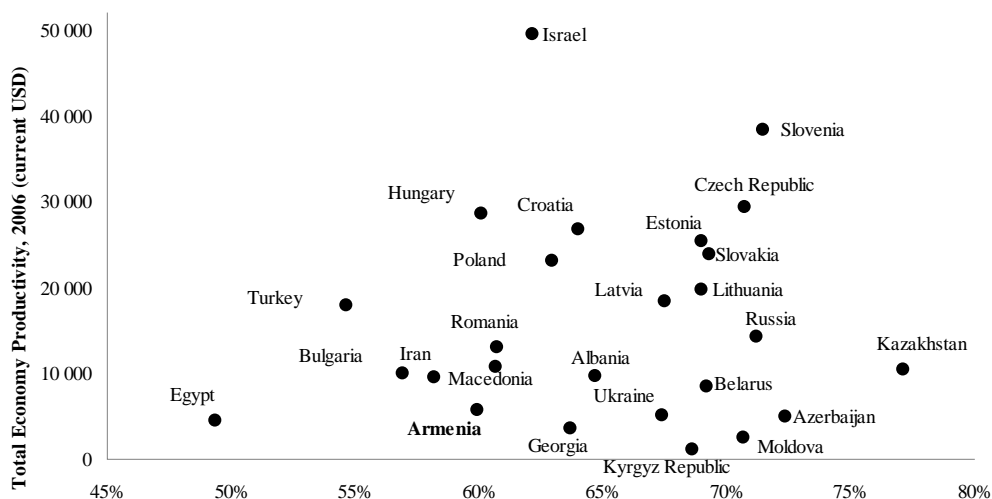
⁴ Armenia had 25,000 scientists and engineers in 1990 vs. 6,700 in 2005 (Arzumanyan, 2006).

⁵ NSS; UNESCO online database, 2007.

important measure of economic performance. However, ensuring higher labor participation in the economy also is a crucial economic and social achievement. Labor productivity can be increased by cutting the labor force, however, this will not bring about real increase in prosperity of the society or the competitiveness of the country.

Labor force utilization depends on labor force as a share of the working age population, employment rate (share of working age population) and hours worked (per employee). Armenia has a low labor force participation rate (59 percent) lagging behind most of the EE, CIS and Eurasian Crossroad countries (Figure 2.7). This reflects the effects of massive emigration of mostly young people since the early 1990s. Official unemployment has been decreasing since 2000 - from 11.7 percent in 2000 to 7.5 percent in 2006. But, official figures for unemployment (or registered unemployment) differ significantly from real unemployment in the country. Real unemployment still remains quite high – in 2006 the unemployment rate was about 30 percent.⁶ Moreover, there is a quite high level of underemployment in the economy, particularly in the agricultural sector, where more than half of the labor force was underemployed and expressed readiness to work more hours. In the industrial and services sector, the levels of underemployment in 2004 were 37.9% and 36%, respectively.⁷ The level of underemployment in terms of working less than 40 hours per week was 30.2%, 39.4% and 73.4% in the industrial, services and agricultural sectors, respectively.

Figure 2.7 Labor Force Participation Rate and Labor Productivity per Employee (2006)



Source: WB, WDI-Online (last accessed October, 2007), ILO Laborsta (last accessed October 2007); IMF, International Financial Statistics May 2007; Authors' own calculations.

Note: Data for Egypt, Georgia, Iran, Israel and Kyrgyz Republic are for 2005

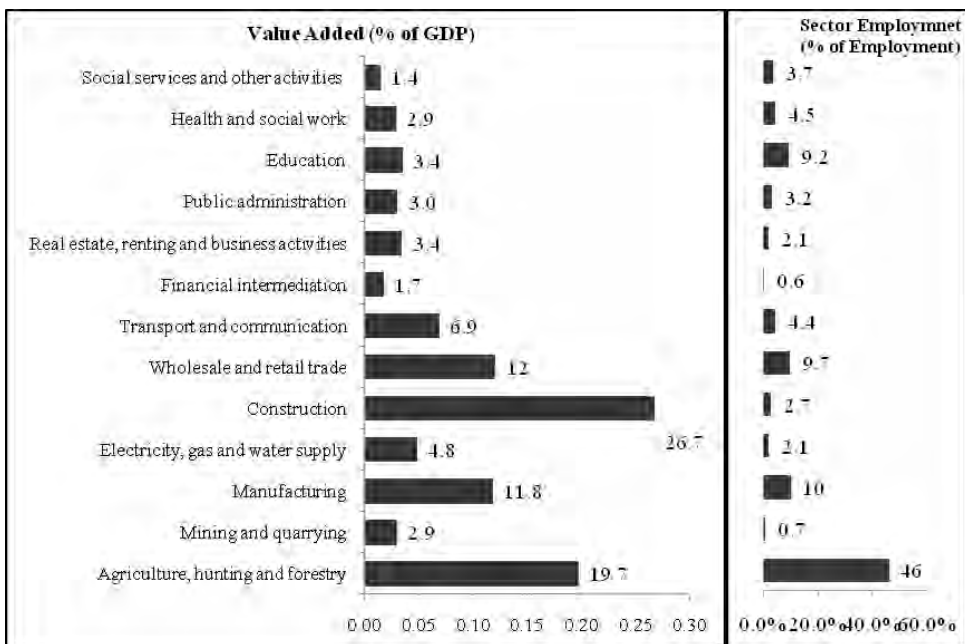
⁶ NSS Survey data (ILO methodology); ILO.

⁷ NSS, Social Snapshot and Poverty in Armenia, 2004.

Based on official data, the most productive sector of the Armenian economy was construction in 2006 (2.7% of the total employment, and 26% of gross value added).⁸ The mining and quarrying sectors also had relatively high productivity (increased due to the rising base metal prices worldwide, which suggests that this may not be a sustainable source of productivity). The productivity level is particularly low in the agricultural sector which employed 46% of the total labor force in 2006, but represented only 20% of gross value-added in the country (Figure 2.8).

While development of the construction sector can have an important multiplier effect for economic growth in the short-run, it is not exportable and, given the small local market, in the long run is unlikely to maintain its leadership position. It is essential therefore, that Armenia in the medium- to long-run relies on the promotion and development of export oriented, high value-added sectors, if it is to enhance its international competitiveness.

Figure 2.8 Shares of Main Sectors - Employment and Value Added (2006)



Source: NSS, 2007.

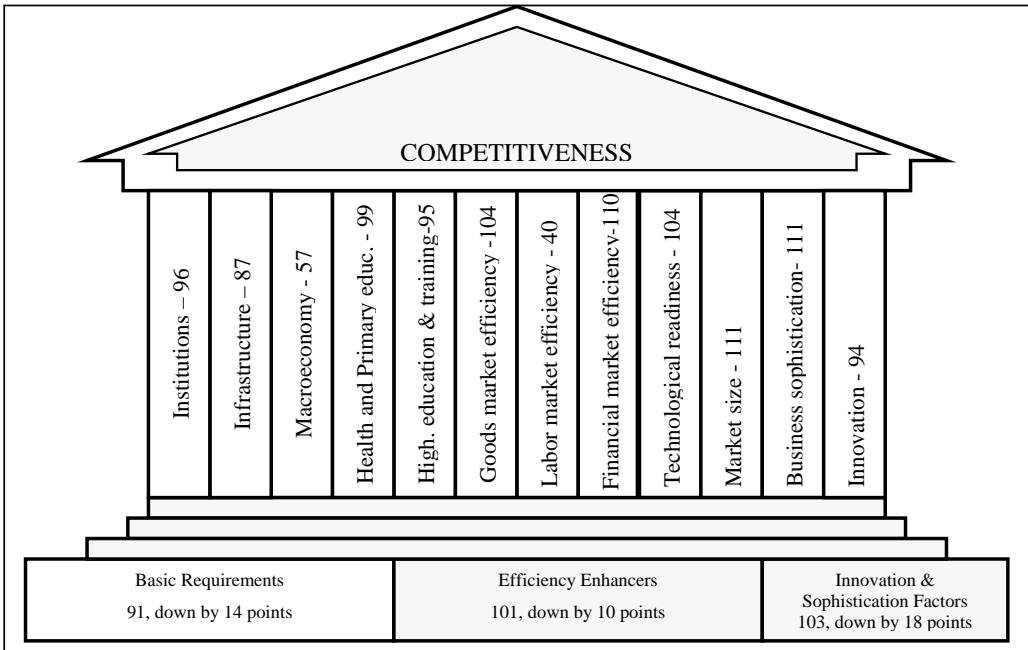
III. ARMENIA'S COMPETITIVENESS POSITION AND ITS CAUSES

In the GCR 2007-2008, Armenia ranked 93rd out of 131 countries in the Global Competitiveness Index (GCI), i.e. Armenia was in the 8th decile of countries - a relatively low ranking, indicating that there is still much room for improvement if Armenia is to become a

⁸ Although it is obvious that the construction sector is the most productive sector in Armenia, it may be argued that the reported level of employment and, thus, the real productivity in the construction sector is much less than the real level due to non-registered employees.

globally competitive country.⁹ The GCI provides a holistic overview of around 110 factors that influence productivity and competitiveness of countries, grouping these factors into “twelve pillars” that are arranged into three broader categories, namely, *basic requirements*, *efficiency enhancers*, and *innovation and sophistication factors*, as presented in Figure 3.1:

Figure 3.1 GCR’s Twelve Pillars of Competitiveness of a Nation



Source: World Economic Forum, 2007.

Note: Rankings are that of GCI 2007-08 compared to GCI 2006-07.

Compared to the previous year, Armenia improved its scores modestly in several areas, but saw its rankings fall because many other countries achieved faster progress. This highlights the fact that we are living in a highly competitive and integrated world, where trivial improvements will be inadequate to stand the competition and achieve sustainable prosperity.

Armenia’s ranking in the GCR acknowledges that Armenia did well in the areas of macroeconomic stability, labor market efficiency and security for doing business. The Government of Armenia should be commended for its notable efforts aimed at: ensuring macroeconomic stability, including good government debt management and low inflation; facilitating procedures for starting a business; establishing a flexible labor market; and ensuring security for businesses.

However, Armenia’s solid macroeconomic performance is not backed by adequate progress in other aspects or pillars of competitiveness, which are necessary for ensuring the sustainability

⁹ The rankings and scores in this section are those of the Global Competitiveness Report 2007-2008 (GCR) if not otherwise noted. The comparisons are with GCR 2006-2007 rankings and scores, if not otherwise mentioned.

of economic growth. There are serious shortcomings or weaknesses in a number of areas, especially at the micro-level, which significantly lower Armenia's competitiveness in the global context and endanger the sustainability of economic development. Areas of concern are so wide that they point out to the need for a comprehensive reform of public and private sectors. They span from general quality of the business environment, especially the financial sector, the lack of judicial independence and the prevalence of favoritism in government decisions to weak performance in higher education and training and low level of innovation.

The sustainability of economic growth and the ability to transform it into a sound basis for economic development in the future depends greatly on the ability of both the public and private sectors to reshape and build their policies on a truly pro-development context. While much emphasis is rightly placed on the need for Government reforms, there is also a pressing need for the private sector to improve its operational and strategic performance.

The current situation with high rates of economic growth, but low and regressing competitiveness is not balanced and sustainable. It's a specific situation that can be characterized as a "growth-competitiveness paradox". This is another impetus for comprehensively understanding the architecture of Armenia's economic growth, its current and future drivers as well as possible sources of improving its competitive position.

3.1 Micro-level Foundations of Competitiveness

We will evaluate the micro-level foundations of Armenia's competitiveness through the lens of the Business Competitiveness Index (BCI) of the GCR, and use the "Diamond Model" (Figure 3.2) developed by M. Porter as an intellectual framework for analyzing the business environment. The BCI is based largely on Executive Opinion Survey data and, in broad terms, measures two broad determinants of the microeconomic environment: (a) quality of national business environment, and (b) sophistication of company strategies and operations. The "Diamond Model" depicts the business environment as a system of four interrelated areas: (a) the quality of factor (input) conditions, (b) the quality of local demand conditions, (c) the context of firm strategy and rivalry, and (d) the presence of related and supporting industries. It has proved to be a very powerful tool in analyzing industry and country competitiveness.

Overall, Armenia has fallen 17 spots in the BCI in 2007 (i.e. BCI index in GCR 2007-2008) relative to 2006 (i.e. BCI index in GCR 2006-2007), falling from 91st rank to 108th among 127 countries.

Table 3.1 Armenia's Business Competitiveness Rankings in the GCR

Business Competitiveness Index-2007 Rank 108, Lost 17 points			
Quality of National Business Environment, Lost 17 Points		Sophistication of Company Strategies and Operations, Lost 23 Points	
2006	2007	2006	2007
89	106	92	115

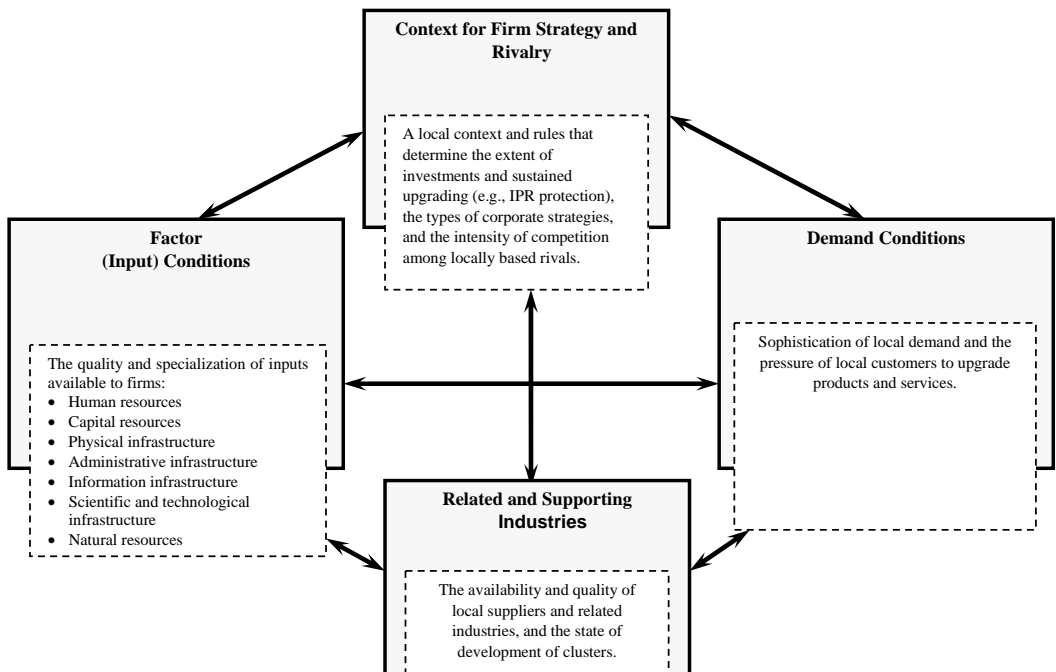
Source: World Economic Forum, 2007.

The quality of the national microeconomic business environment is an important determinant of the level of sophistication an individual company can reach. No matter how capable firms are, in order to employ sophisticated operations and strategies, they need developed administrative and physical infrastructure, access to financial resources, and a highly skilled labor force. They need also suppliers of necessary services and materials to produce sophisticated goods; demanding customers urging them to innovate and upgrade to build competitive edge over time; and stringent local competition to enhance productivity.

However, a firm's ability to reach an increased level of sophistication, upon which the nation's productivity depends, is also partly a function of its own strategy and operations. No matter how favorable or developed a nation's microeconomic business environment is, a nation needs companies that are able to design and employ sophisticated operations and strategies. Ultimately wealth is created by businesses and as a general rule, productive companies tend to have a high degree of sophistication, with more efficient operational processes and strategies. Competitive companies have professional management who are able to design winning strategies and drive the company; employ efficient and innovative ways to produce and market unique and sophisticated goods; collaborate and make effective use of services and "unusual efforts" of skilled engineers and scientists; invest in R&D adopt sophisticated technologies to upgrade their current competitive position; and hire and train high quality professionals.

The assessment of the "national diamond" of the business environment is provided below in Figure 3.2:

Figure 3.2 National Business Environment (Diamond Model)



Source: Michael Porter, 1990.

Since 2001, recognizing the need for improving the business environment in the country, the Government initiated a number of reforms including the consolidation and reduction of business inspections, simplification of administrative procedures, reduction of time for business registration, and streamlining of the licensing regime. The government's consultation mechanisms with the private sector were strengthened and a high level Business Council, chaired by the Prime Minister, was established. In 2007 the government also created a National Competitiveness Council to boost the competitiveness of the country.

According to the most recent World Bank's Doing Business Report - 2008, Armenia was ranked 39th among 179 countries, and was ahead of most countries of the EE, CIS and Eurasian Crossroad regions, but lagging behind Estonia (17th), Georgia (18th), Latvia (22nd), Lithuania (26th), Israel (29th) and the Slovak Republic (32nd). In Doing Business-2008, there was a significant positive change related to the improvement of legislation aimed at easing access to credit. However, under the GCR (which measures actual practice rather than a formal regulatory framework), Armenia had a disappointing showing in terms of the difficulty in obtaining a bank loan (123rd out of 131 countries).

Table 3.2 Ease of Doing Business in Armenia, 2007-2008
(among 179 countries)

Ease of...	Doing Business 2008 Rank	Doing Business 2007 Rank	Change in Rank
Doing Business	39	46	+7
Starting a Business	47	44	-3
Dealing with Licenses	73	72	-1
Employing Workers	48	48	0
Registering Property	2	2	0
Getting Credit	36	62	+26
Protecting Investors	83	81	-2
Paying Taxes	143	137	-6
Trading Across Borders	118	133	+15
Enforcing Contracts	64	64	0
Closing a Business	42	43	+1

Source: World Bank, 2007; <http://www.doingbusiness.org/ExploreEconomies/?economyid=10> (last accessed October, 2007)

A. Management

The lack of professionally trained and globally experienced management and the unwillingness to delegate authority to professionals are significant impediments for Armenian businesses in gaining the ability to choose the most efficient operations and effective strategies and, hence, to increase the productivity and competitiveness of companies. This situation may in particular be caused by (a) a lack of awareness of the importance of professionally trained managers, which, in turn, could be a result of the lack of knowledge, or of imperfections in competitive environment due and absence of strong pressures towards increasing efficiency and management capacities (b) lack of trust; (c) a

“non-merit based” culture of hiring managers and other key professionals, i.e. managerial and other key positions in companies are most frequently held by relatives or friends independently of their professional qualifications. Poor management and a non-merit based system of hiring employees are priority problems that have to be tackled if Armenian companies want to become productive and competitive in global context.

IV. TOWARDS A COMPETITIVE ECONOMY

We believe that Armenia has yet to adopt a development-driven policy context. Today Armenia faces a serious challenge of rethinking and reshaping the context of its policies in order to introduce a truly development oriented agenda, which would enable the country to become a competitive player in the global marketplace.

Immediately following independence, Armenia undertook comprehensive reform efforts toward establishing a market economy and democratic society. This was a period characterized by dramatic economic decline, disruption of trade, the Nagorno-Karabakh conflict and transportation blockade, shortage of energy, food, and other consumer products, hyperinflation, and high levels of unemployment and poverty. Under these circumstances, the government grew accustomed to governing in “crisis mode”, forced to find quick solutions to urgent, short term problems. Armenia’s policy context became a “survival context”, which resulted in a short-sighted view of policy and a general lack of policy coordination and of an overall strategy toward policy development. This has been exacerbated by very weak public and private institutional capacities.

After achieving economic stability and reaching a ceasefire in the Nagorno-Karabakh conflict in the mid 1990s, the nature of Armenia’s policies became more redistributive. The underlying context of economic reconstruction was the redistribution of the country’s wealth among its citizens. Mass privatization of small and medium entities was the major direction of reforms. The privatization has been highly inequitable and resulted in the concentration of the country’s productive assets in the hands of a few groups. The context continued to be characterized by a “fire fighting” approach, with remaining elements of the “survival context”. The “redistribution context” implied better, but still weak coordination.

At the beginning of this decade, Armenia adopted a poverty reduction approach (“social context”). In 2003, for instance, Armenia adopted the Poverty Reduction Strategy Paper (PRSP), which became an overarching strategic document based upon which the Government developed its policies and programs, and designed its medium term budgetary expenditures. The PRSP has become a single comprehensive framework that established long term measurable objectives and established important linkages between different aspects of social, economic and institutional life.

In contrast with previous approaches to policy development, policies during this period have been characterized by the introduction of elements of strategic thinking, longer-term planning, better coordination of policies and operations, improved institutional capacities, and an attempt to set out priorities. However, policies have remained primarily “inward looking”, without regard to the international context in which they are being made. Additionally, the government’s policies have not made economic development a centerpiece of their approach. While the PRSP contains objectives related to economic development, it remains unclear what the drivers of Armenia’s competitiveness and

economic development are. It fails to deal with fundamental questions, such as the sectors in which Armenia can successfully compete globally, what its value proposition is, or what its competitive strengths and weaknesses are.

We believe that these can be best addressed if Armenia adopts an economic development-focused strategy. Policies and projects should be viewed and measured against their implications for economic development. This will require a higher level of coordination of the country's policies and projects and clear linkages and concerted interaction between numerous sectors and aspects of economy.

Such a strategy should be based on a realistic and honest assessment of the nation's capabilities and its opportunities in the global marketplace, which would permit Armenia to identify the unique strengths upon which the country can compete internationally, and which would set out a road map to development, enabling effective coordination of activities and establishing priority areas or sectors. This would allow for more efficient use of scarce financial and other resources.

We propose a structured approach to enhancing Armenia's competitiveness distinguishing two layers of action, namely "Quick Wins" and "Strategic Breakthrough". The Quick Wins are targets that are achievable in a short time period within the limits of current resources and competencies, while actions in the Strategic Breakthrough sections define factors that may move Armenia to the next level of competitive position vis-à-vis other countries and direct competitors.

4.1 Strategic Breakthrough

Armenia is in need of new growth drivers based on sustainable sources of competitive advantage. Given current trends, this calls for real strategic breakthrough which leaves the decision makers with two fundamental questions:

1. What should be the role of Armenia in the regional and global economy?
2. What are the tools to achieve it?

A. Strategic Positioning of the Armenian Economy

The experience of many resource-scarce but highly successful economies that managed to transform their early acceleration into sustainable economic growth suggests that clear positioning of a country is a key ingredient of success. Such positioning implies defining a *unique* and *sustainable* set of local conditions, skills, products and services that will lead to the creation of competitive advantages. At the heart of the positioning is the definition of a country's *value proposition*. A core value proposition points to the specific role the country plays in the world or regional economy. These can include its value as a business location, the range of businesses, functions and competences for which the country can become a base for globally competitive companies. Value proposition inherently incorporates the notion of competitive arena – the region, range of countries, competitors or the entire world.

Given the interplay of the factors mentioned earlier in and around Armenia, it has a narrow menu of possible choices for its positioning and value proposition. Unique human capital represents one of the key ingredients for such a value proposition. At the same time, human capital can hardly represent a competitive advantage unless it has unique characteristics.

For a country like Armenia, a few unique characteristics of human capital deployed in areas producing high value added products and services may become an economy-wide source of advantage and key differentiating feature. For that, the targeted areas need to be narrow enough to enable focused efforts, greater leverage and larger impact.

Armenia may strive to become an R&D center at the regional level and use it to become a leader in a few areas. Those areas could be either technology-intensive (such as selected segments in software programming or “green” mining and metallurgy), network and knowledge-intensive (for example selected niches in financial and educational services), or creativity-intensive (including selected areas of culture-related commercial activities (cultural tourism centered around key established cultural events/artifacts of global or regional significance). Becoming an R&D center requires development of key competencies and skills that may have business appeal for regional and global players to attract investments and technologies into Armenia. The effort should capitalize on past tradition, selected functioning R&D and scientific institutes and emerging trends in some areas (such as IT).

Such positioning will require re-definition of a notion of region as Armenia’s perceived positioning arena. Re-defining “competitors” should become a core theme for the country’s branding and image building. That theme should dominate all key communication efforts and be shared by the government, private sector, academia and society at large.

Currently, it is most common to consider Armenia as a part of the South Caucasus, CIS or Eastern Europe. However, none of these groups of countries alone provide favorable positioning settings for Armenia. An unfavorable location and the conflict with Azerbaijan in the case of South Caucasus, dominance of Russia and lack of perception as a region in case of CIS, and impossibility to attain leadership roles in case of Eastern Europe make these regions not well suitable for positioning purposes.

Armenia may consider building its communication strategy utilizing the notion of “Eurasian Crossroad”. While the latter is not a well defined region in the political, economic or geographic sense, it has multi-layered and meaningful connotations which are exploitable for positioning purposes. The concept of “Eurasian Crossroad” has deep cultural, historic, economic and political roots. It appeals to the idea of intersection of civilizations, cultures, religions and political systems. While the interpretation as to its geographic frontiers may be voluntary, it provides countries with greater flexibility for positioning and communication purposes. The region will provide more effective positioning platforms if it includes countries such as Turkey, Georgia, Azerbaijan, Armenia, Iran, Iraq, Syria, Jordan, Lebanon and Israel (Central Asian or Gulf countries can be considered a part of the region in a much broader sense). The strategic positioning based on the concept of a crossroad will also help overcome the perception of Armenia as a country in a landlocked location without significant natural resources. The region defined in this way provides opportunities for Armenia to capture leading roles in a few selected areas that demand highly developed human capital, access to global networks and a tradition of science and technology. This option will imply positioning Armenia as an R&D center in skill-intensive areas in the Eurasian crossroad region. As such a claim or vision is highly ambitious given the competitive positions and claims by direct competitors in the region, this will require an organized effort with an integrated strategy framework and identification and deployment of key levers.

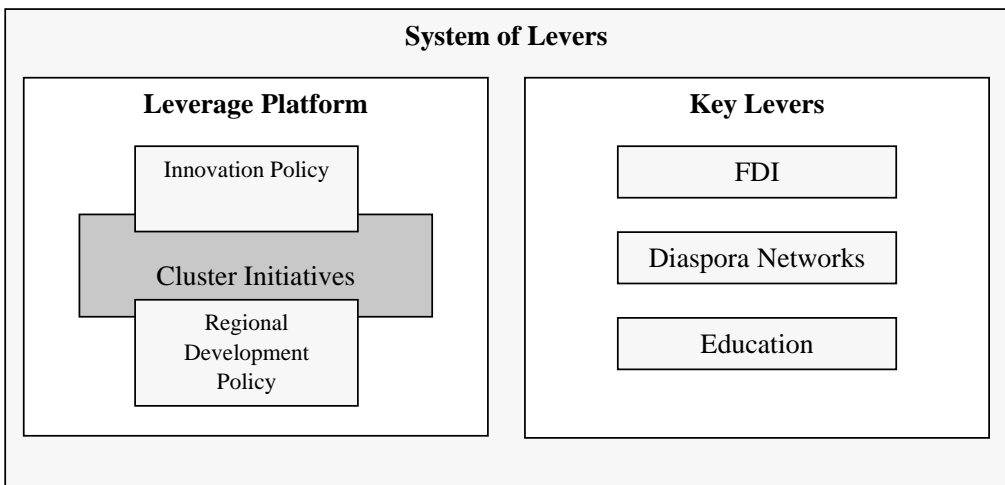
B. Key Levers for Breakthrough

Strategic breakthrough refers to the creation, nurture and development of *internationally competitive* industries that will make Armenia's value proposition to the world well-shaped and visible. As resources are scarce, this calls for identification of a few selected strategic levers that could be deployed to attain high impact. The latter does not eliminate the need for broad-based public and private sector reforms, improvement of general business environment, provision of general pro-development economic policy, etc. Instead these two streams need to reinforce each other.

As in mechanics, levers are deployed using a base or platform. Base in this case may be an effective sector-specific, micro-level policy platform. Such a platform will direct the levers' energy and impact to specific sectors, technologies and locations. The combination of levers and the bases can be called a leverage system. The leverage system that has been identified for the purposes mentioned above will have a three-tier hierarchy as described in Figure 4.1 The Leverage Platform will consist of three sets of policies and initiatives – cluster policy, innovation policy (which is related to and mutually reinforces cluster policy) and regional development policies. The Key Levers are targeted foreign direct investment (FDI), formation and development of Diaspora entrepreneurial networks and strategic initiatives in education.

Figure 4.1 System of Levers

The central role in shaping the leverage platform will belong to cluster initiatives (or policies). This will be called the *policy nexus*. The cluster initiatives in potentially internationally competitive clusters will be enhanced by supportive innovation and regional development policies which can be called *policy add-ins*. The combined and integrated application of this platform is intended to create an efficient and conducive context for applying the levers.



Leverage Platform

Policy Nexus - Cluster Policies. The concept of clusters has become very popular in many countries during recent years. As its practical manifestation, a large number of cluster

initiatives at national and regional levels have been initiated with massive public support and resource infusions.

The cluster policies can create an overarching policy context where different functional or sector specific policies can be incorporated and implemented. At the current stage the most urgent competitiveness policy ingredients with strong synergies are seen to be innovation and regional development. The regional disparity impedes competitiveness by skewing the benefits of economic growth. Fortunately, regional policy is an emerging policy priority for the Armenian government; however, it should be incorporated into the right mix of measures and broader economic development policy context. Another emerging policy domain is innovation policy that is supposed to energize Armenia's potential to become a location for producing high value-added products. The effectiveness of these two policy priorities is dependent on their optimal combination and coordination as well as their targeted deployment. The cluster policies can provide an appropriate context to assure these two aspects, as clusters are the ultimate development targets incorporating both geographical as well as technological dimensions.

Generally, well designed frameworks of collaboration can be worked out by the government so that different efforts don't overlap and result in a waste of resources. However, it should be noted that different clusters require different strategies and different sets of interventions; therefore, those frameworks should be flexible enough to capture these differences. They must also take into account location-based specifics of the clusters which can be part of regional development policies.

In addition to this, a very focused and intensive cluster development effort is required in selected areas to raise Armenia's international competitiveness. Currently, from the perspective of competitiveness, one of Armenia's key challenges is the development of a few internationally competitive industries that will set the economy on the path to innovation. No country can be competitive in all industries. Specialization is at the heart of competitiveness. Only a handful of industries can become drivers of Armenia's international competitiveness. Given also the limited public and private resources that can be mobilized, the efforts should be highly focused and deliberately designed.

While there is a need for thorough research for short-listing the promising clusters there is already a high degree of consensus around some clusters among key stakeholders as to their potential as priority areas. The Armenian government has already prioritized IT and tourism; however, despite some strategic approach is emerging, this still requires a political will and competence to commit necessary resources.

Innovation Policies. As Armenia strives to build a knowledge-based economy, the creation and development of innovation-supporting infrastructure becomes a critical challenge for the next 5-10 years. The international competitiveness of the Armenian economy depends greatly on its companies' abilities to create and market innovative products and services in foreign markets. While still sporadic and inconsistent, there is an emerging debate about the creation of elements of a national innovation system in Armenia. The government has adopted a program on the formation of an innovation system for 2005-2010; however, the committed funds are extremely small, the framework is not yet developed and there is no adequate understanding of its role and place in the overall policy context.

The general cluster approach to organizing and stimulating innovative and productive entrepreneurship can become a coherent platform for innovation policy in Armenia. Under this approach the cluster priorities will become priorities for innovation policy based on the need for support of innovative process by specific clusters. The selection of tools may include: (a) critical infrastructure development, (b) knowledge and information centers, (c) incentive schemes, (d) procurement policies.

Regional Development Policies. Despite the fact that the government has already prioritized this issue, there is still a vague understanding of how to combat the problem. The key pitfall here is that it may be dealt with as if it is a purely social problem. Sustainable development is possible only if it is driven by commercially viable projects based on key specializations of each region. Specializations should be based on the right mix of comparative advantages of regions that can be gradually developed into competitive advantages. Specialization naturally caters to the concept of clusters. Thus, instead of current infrastructure building projects implemented in isolation without complex development plans, this approach calls for highly coordinated, deliberately crafted public-private collaborative efforts to create regional clusters. On the part of the government this may still include infrastructure development; however, in this case well tailored to the needs of emerging business sector in the region and enhanced by private investments.

The approach will require development of strategic profiles of each region. The strategic profiles and action plans of each region should be synthesized and integrated into the general cluster-based economic development policy. This approach will help introduce elements of a bottom-up and top-down, business-oriented process to the design of economic policies. It will also ensure a shift from a macroeconomic focus toward a microeconomic focus, which is an absolute imperative for public policy in the economic area in Armenia.

Key Levers

The three-component leverage platform will create a pro-business economic development policy context, within which different reform initiatives can be implemented. However, there are three key factors that can be deployed to bring a true breakthrough. In the context of Armenia these are: (1) technological FDI, (2) Diaspora networks and (3) superior education. These factors were determined taking into account three criteria: (1) Armenia's possible value proposition alternatives suggested in this paper, (2) Armenia's comparative advantages that can be developed into unique competitive advantages, and (3) the need for mobilization and prioritization of primary tools for strategic breakthrough

FDI. Despite the fact that Armenia declared an open-door policy to FDI, this has not become a major driver of technological upgrade and specialization in the Armenian economy. In order to achieve this, Armenia should pursue a clearly targeted FDI attraction strategy. The building blocks of such an effort should be:

- well defined target markets – right mix of target multinationals;
- clear priorities deriving from policy context (fit with cluster priorities, applying innovation incentives);
- initial “seed” public investments in creating fundamentals/basic infrastructure in targeted clusters (in many cases specially tailored to certain multinationals' needs);

- aggressive marketing and targeted promotion plans supported by an adequate budget;
- involvement of a few world renowned top executives (preferably non-Armenians) as leaders in promotion and communications;
- utilization of the Diaspora executives holding key positions at targeted companies;
- upgrade of institutions involved in FDI attraction.

Diaspora. The Diaspora may become a unique source of competitive advantage for Armenia that can be matched only by a few other nations. An effective partnership can be built on a “hub-and-spoke” model. Within that model Armenia should be viewed as a center (hub) for global Armenian business and other partnership flows. The gradual move of HQs, coordinating units, information centers and other resources of pan-Armenian organizations and networks to Armenia is only one of many ways to create such a model. Connections and competences are the most critical resources that Diaspora can invest into Armenia’s economy. It is a unique source for creating training and innovation centers, bringing in world-class expertise, and accessing the most sought-after corporate leaders of global companies. This calls for a set of coordinated activities as well as highly efficient institutional forms of engagement.

Education. Education must be made a priority if Armenia’s competitiveness is to be based on knowledge and skill-intensive characteristics and if its regional value proposition will be based on unique human capital. This leads to several preconditions (principles) that need to be satisfied for a successful deployment of education as a competitiveness lever:

1. Very high standards of primary education matching the best international practices. Basic education should not be biased towards any specialization, but should provide comprehensive knowledge, creative thinking and high ethical values. However, mathematics (and some natural sciences) should be a high priority as a basic discipline for all natural sciences.
2. Basic education should become a key communication channel of national ideals and major aspects of national identity. Such values will constitute the fundamentals of competitiveness thinking as they will define common national goals and aspirations.
3. Stress on specialization in special and higher education congruent with cluster development preferences. Those areas shall receive most of the resources.
4. Leadership aspirations in 2-3 areas of specialization in the region. Armenia should strive to become a leader in the provision of special educational services in a few areas linked with overall cluster and specialization preferences.
5. Creation and development of a few “centers of excellence”, scaling them up, leveraging them and replicating them on a larger scale to achieve spillovers throughout the entire system.

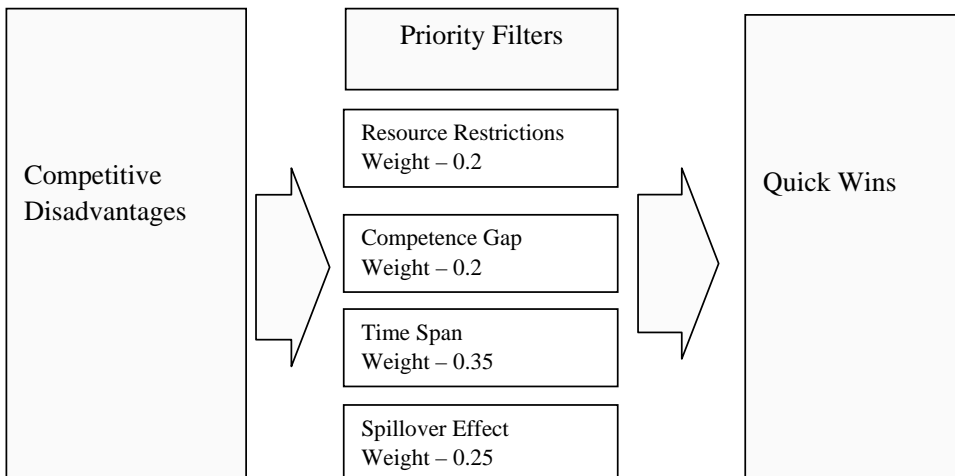
Quick Wins

We developed a special analytical tool to identify short-term priorities and select the quick wins. The tool has been entitled the “Prioritization Filter”. The competitive disadvantages or areas where Armenia trails most nations are assessed from the viewpoint of feasibility of rapid improvements given the current resource and competence constraints as well as its overall impact on the entire economy. The Prioritization Filter incorporates four key criteria applied to assess and prioritize different competitive areas. Thus, the mentioned four criteria are:

- Resource Restrictions
- Competence Gap
- Time Span
- Spillover Effect.

The factor of “Resource Restrictions” assesses the availability of all types of resources (excluding human) necessary to address a certain competitive disadvantage in the short term. The “Competence Gap” factor assesses the existence or lack of required knowledge, expertise, experience, and will to mitigate a specific disadvantage. The “Time Span” is the most important factor as it assesses the feasibility of improvement of a certain issue in 2-3 years, while the “Spillover Effect” provides an assessment of the potential positive effects such improvements might have on the entire economy at the current stage, i.e. positive externalities of specific actions. Each criterion is assigned a weight and assessed using a 1-5 scale.

Figure 4.2 The Logic of the Prioritization Filter to Identify Quick Wins



Using this methodology, 10 factors have been identified as possible quick wins, grouped into three distinct areas:

- Energizing financial sector
- Improving selected elements of business environment
- Promoting technology usage (see Table 4.1).

Table 4.1 Identified Quick Wins

Energizing Financial Sector	<ol style="list-style-type: none"> 1. Easing access to loans and expanding credit activity by banks 2. Reduction of interest rate spread
Improving Selected Elements of Business Environment	<ol style="list-style-type: none"> 3. Raising effectiveness of antitrust policy 4. Improving the effect of taxation (creating tax incentives, total tax rate, burden of customs procedures, non-wage labor costs) 5. Introducing incentives for FDI in prioritized areas
Promoting Technology Usage	<ol style="list-style-type: none"> 6. Spreading the use of cellular telephones 7. Encouraging the use of personal computers 8. Encouraging Internet usage 9. Regulatory framework encouraging use of ICT 10. Government procurement of technology products

V. CONCLUDING REMARKS

Armenia still has a long way to go in order to create a highly competitive economy. It has already recorded notable achievements in ensuring basic conditions for economic development. However, the next stage requires more focused efforts, greater skills and higher aspirations. Success will depend on the nation's firm choice, its ability to set clear goals, achieve consensus, mobilize resources and work diligently towards those goals. The energizing force will have to be the country's leadership since "if a man knows not what harbor he seeks, any wind is the right wind" (Seneca).

REFERENCES

- Arzumanyan, T. (2006), *Current Issues of Research, Development and Innovation in Armenia*, International Journal of Foresight and Innovation Policy, Vol. 2 No. 2, pp. 133-145
- Chami Batista, J. (2004), *Latin American Export Specialization in Resource-Based Products: Implications for Growth*, The Developing Economies, Vol. 42 No. 3, p337-370
- International Labor Organization (2007), Laborsta Internet, Geneva
- International Monetary Fund (2007), International Financial Statistics, Washington D.C.
- Lall, S. (2000), *The Technological Structure and Performance of Developing Country Manufactured Exports, 1985–1998*, Queen Elizabeth House Working Paper Number 49, Oxford University
- Mahmood, A. (2004), *Export Competitiveness and Comparative Advantage of Pakistan's Non-agricultural Production Sectors: Trends and Analysis*, the Pakistan Development Review, Vol. 43 No 4, p541-561
- National Statistical Service of Armenia (2008), Yerevan, Armenia (www.armstat.am)
- Porter, M. E. (1990), *The Competitive Advantage of Nations*, New York: The Free Press.
- Porter, M. E. (1998), *On Competition*, the Harvard Business Review Book Series, Boston, MA, United States
- UNESCO Institute for Statistics (2007), Online Database, Paris
- United Nations Conference on Trade and Development (2007), UNCTAD Handbook of Statistics On-line, New York and Geneva, United Nations
- United Nations Conference on Trade and Development (2004), *Development and Globalization: Facts and Figures*, New York and Geneva, United Nations
- World Bank (2007a), *Doing Business 2008*, Washington DC
- World Bank (2007b) World Development Indicators On-line, Washington D.C.
- World Economic Forum (2006), *The Global Competitiveness Report 2006-2007: Creating an Improved Business Environment*, Hampshire: Palgrave Macmillan
- World Economic Forum (2007), *The Global Competitiveness Report 2007-2008*, Hampshire: Palgrave Macmillan, New York, United States